

Library

TAUNTON RURAL DISTRICT

Annual Report

OF THE

Medical Officer of Health

FOR THE YEAR 1952

BY

HUGH MORRISON, M.B., Ch.B., D.P.H.



TAUNTON :

H. G. MOUNTER AND CO., LTD.,

PRINTERS

TAUNTON RURAL DISTRICT

Annual Report

OF THE

Medical Officer of Health

FOR THE YEAR 1952

BY

HUGH MORRISON, M.B., Ch.B., D.P.H.

TAUNTON RURAL DISTRICT

PUBLIC HEALTH STAFF, 1952

*Medical Officer of Health and Medical Superintendent of the
Taunton Isolation Hospital and Taunton
Tuberculosis Sanatorium, Taunton :*

HUGH MORRISON, M.B., Ch.B., D.P.H.
(appt. August, 1946).

Senior Sanitary Inspector:
W. PLIMMER, C.R.S.I. (appt. July, 1950).

Additional Sanitary Inspector :
E. G. PAYNE, C.R.S.I. (appt. Feb., 1936).

Matron, Isolation Hospital and Tuberculosis Sanatorium :
Miss M. E. MOSSMAN, S.R.N. (appt. March, 1943).

Address :
Taunton Isolation Hospital, Cheddon Road.
Telephone : Taunton 2396.

Clerk to the Council :
R. G. WORNELL, Mary Street House, Taunton.
Telephone : Taunton 2285/6.

To :

THE CHAIRMAN AND MEMBERS OF THE
TAUNTON RURAL DISTRICT COUNCIL.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present my Annual Report for 1952. The Report is set out in the manner of previous ones, so that comparison with former years can easily be made.

As in previous reports, I insert here a few general comments on points of interest or importance, some of which are dealt with in greater detail in the body of the report.

- (1) A study of the table dealing with infectious diseases reveals some interesting facts. Scarlet Fever, which in the previous year produced only five notifications, was responsible for 33 notifications in the year 1952, and this figure amounted to exactly the same incidence per 1,000 of population as occurred in England and Wales taken as a whole. This disease, which in former times was a formidable one, has been relatively infrequent and trivial for the past decade or two, but there are some signs that it may again be tending to change its type, and to become more severe and menacing. Fortunately, there are now a number of potent remedies available to help mitigate its effects.

Measles showed 27 notifications as against 147 in 1951, which illustrates the tendency of this disease to assume epidemic form every second year. The numbers may be expected to rise again in 1953.

Food Poisoning is a condition which has recently attracted much attention, and it will be seen that 11 cases have been reported. These occurred in the form of a concentrated outbreak affecting one of the military camps, where all the sufferers were struck down within a period of 48 hours. The illness was sharp and distressing, but was followed by rapid recovery in all cases. The type of bacteria responsible was not established, but the source of spread of infection was traced to a food handler in the kitchen of the camp, and measures were taken which prevented the occurrence of any further cases. An

outbreak of this kind draws attention to the importance of our efforts to improve the standard of hygiene as applied to food handling in this country.

- (2) It will be noticed that there has been a small but significant drop in the number of new cases of Tuberculosis notified during the year—38, as compared with 45 in 1951. It is believed and hoped that the effects of strain and disturbed nutrition during the war years may now be wearing off; also, fewer new cases should appear, as the years go on, of the type previously unsuspected but brought to light by new and improved diagnostic methods.
- (3) Useful work was done during the year towards securing improvement in the quality of water supplies in the district. The supply to the eastern parishes, which comes from gathering grounds on Staple Hill, and which serves a considerable population, had from time to time been yielding samples which were unsatisfactory on bacteriological tests. Officials concerned went thoroughly into this matter and it was decided to recommend to the Council that a new chlorinating plant be installed at the main reservoir. The work was promptly put in hand, and from the time when the new plant came into operation, samples of this water have been entirely satisfactory.

A sub-committee also visited and considered the water undertakings on the western side of the district, and it was agreed to carry out careful testing and observation of these over a period of several months in order to estimate the desirability of chlorination.

- (4) There has been no sign of a lessening of the number of applications for permission to station and use movable dwellings in the district. During 1952, 27 new licences were granted for individual caravans, and a further 11 new licences applied to sites capable of accommodating 62 caravans if fully used. It is estimated that there were at least 249 movable dwellings in use in the Taunton Rural District at the end of 1952.

New schedules of conditions have been prepared setting out various hygienic matters which have to be attended to satisfactorily in connection with each site or caravan proposed to be licensed. These have been adopted, and only in exceptional circumstances is any

lowering of these standards accepted. Thus constant attention is given by the Public Health Department to the important object of securing satisfactory living conditions in these movable dwellings.

- (5) As part of the course of lectures arranged by the Welfare Section of the Civil Defence Service, a talk on Hygiene in Emergency Conditions, lasting about an hour and followed by a full discussion, was given in a number of parishes by the Medical Officer of Health. The opportunity was taken to discuss many aspects of Health and Hygiene, and it was felt that these talks, whose primary purpose related to Civil Defence, may have had considerable value also from the point of view of Health Education in general.
- (6) An important new development has taken place in the field of rodent control, in that the use of the substance Warfarin has been adopted in the district as the standard method of destroying rats. This chemical has several advantages over the older types of poison, the chief one being that it does away with the necessity of pre-baiting, thus saving the operator's time, and allowing him to cover the district more quickly and more frequently. The result, over a period of time, should be a substantial reduction in the rat population, and it is hardly necessary to stress the desirability of this when looked at from a Public Health angle. A point on which some satisfaction may be felt is that the new method, although fully as efficient as the older ones in its effects, produces less suffering and is a more humane means of destroying these creatures. The Chief Sanitary Inspector has written an article in the Winter 1952 number of the Rural News Sheet dealing in more detail with the action of Warfarin, which those who are interested in the subject are advised to consult.

Once again I wish to thank the Members of the Council, the Clerk, the Staff of the Public Health Department, and the Matron and Staff of the Isolation Hospital for their willing assistance and co-operation.

I am,

Your obedient Servant,

HUGH MORRISON,

Medical Officer of Health.

TAUNTON RURAL DISTRICT

Statistics for the Year 1952

Area (in acres)	70,675
Estimate of resident population, mid-year 1952 ...	21,470
Census population, 1951	20,500
No. of inhabited houses according to the Rate Books on 31st December, 1952	5,495
Rateable value 31st December, 1952	£106,943
Sum represented by a 1d. Rate, year 1952/53	£433

Physical Features and Social Conditions

Taunton Rural District lies in the south-western region of Somerset, surrounding Taunton Borough, the County Town. It is roughly triangular in shape, with Taunton Borough situated near the middle of the triangle. The boundary of the district is formed on the north by the Rural Districts of Williton and Bridgwater; on the east and south-east by the Rural Districts of Langport and Chard; on the south by the County of Devon; on the south-west and west by the Rural District of Wellington.

There is considerable variation in the type of country found in different parts of the district: in the north and north-west there is high ground forming portions of the Quantock and Brendon Hills; in the south the land rises to the hill parish of Churchstanton lying in the Blackdowns; between these regions lies the fertile valley of Taunton Deane, with the ground falling towards the east to the flat moors and marshy ground surrounding the lower reaches of Tone and Parret. Geologically also, the formations vary. In the north are found chiefly old and new red sandstone; in the south, lower lias and upper greensand; the valley regions have new red marl, new red sandstone and alluvium.

The climate is equable, with an average annual rainfall of 36.5 ins., and an average mean daily temperature of about 41° F. in January and 62° F. in July.

Rich arable and pasture land covers most of the district, but some of the hill regions are in the rough uncultivated state, and the soil on the Blackdown Hills tends to be poor in quality. In the eastern parishes the land is subject to seasonal flooding. Communications are good, and almost all parts of the district are easily accessible by road. Following the Tone valley through the middle of the district runs one of the main lines of the Western Region of British Railways and three branch lines leave it at or near Taunton to run to the north, south and west.

There are thirty-two parishes with estimated populations varying from 80 to 2,650. Habitations are widely scattered over these parishes, but there are several sizeable villages, the largest being Bishops Lydeard, Bishops Hull, Lydeard St. Lawrence, North Curry and Trull.

Most of the inhabitants are engaged in some form of agriculture, dairy farming being particularly important. General farming is also largely practised, and allied activities are withy growing and basket-making, fruit farming and cider-making. There is a paper mill in the district which employs a fair number of people, and another source of employment for men is stone-quarrying which is carried out on a considerable scale. Many of the residents in the rural district travel daily to Taunton to work in factories and other establishments.

Extracts from the Vital Statistics of the Year

Live Births :—

		Total	M.	F.	} Birth Rate per 1,000 of the esti- mated resident population ... 14.95
Legitimate	...	306	140	165	
Illegitimate	...	15	7	8	
		<u>321</u>	<u>147</u>	<u>174</u>	

Still Births—Total 5.

Rate per 1,000 total (live and still) births ...	...	15.34
Rate per 1,000 of the estimated resident population	...	0.23

Deaths—Total 202.

Rate per 1,000 of the estimated resident population	...	9.41
---	-----	------

Deaths from Puerperal Causes—Nil.

	Deaths.	Rates per 1,000 births.
From Puerperal Sepsis	—
From other Maternal Causes	—

Deaths of Infants under 1 year of age—Total 10.

Legitimate	...	...	...	...	10
Illegitimate	...	...	...	...	—
Rate for all infants per 1,000 live births	...	...	...	...	31.15
„ legitimate infants per 1,000 legitimate live births	...	...	...	...	32.67
„ illegitimate infants per 1,000 illegitimate live births	...	...	...	...	—

Deaths from Cancer (all ages) ...	...	...	...	32
„ Measles (all ages) ...	...	...	...	—
„ Whooping Cough (all ages) ...	...	...	...	—
„ Diarrhoea (under two years of age) ...	...	...	...	—

Rates for England and Wales as a whole :—

Live births per 1,000 civilian population	...	15.39
Still births „ „ „	...	0.35
Deaths, all causes „ „ „	...	11.39
Maternal Mortality, all causes, per 1,000 total (live and still) births	...	0.72
Infant Mortality, all causes, per 1,000 total (live and still) births	...	27.60

Causes of Death during 1952

	M.	F.	Total.
Tuberculosis, respiratory	3	1	4
Tuberculosis, other	1	1	2
Syphilitic disease	—	—	—
Diphtheria	—	—	—
Whooping cough	—	—	—
Meningococcal infections	—	—	—
Acute poliomyelitis	—	—	—
Measles	—	—	—
Other infective and parasitic diseases ...	—	—	—
Malignant neoplasm, stomach	1	—	1
Malignant neoplasm, lung, bronchus ...	3	—	3
Malignant neoplasm, breast	—	1	1
Malignant neoplasm, uterus	—	1	1
Other malignant and lymphatic neoplasms ...	20	6	26
Leukæmia, aleukæmia	2	—	2
Diabetes	1	—	1
Vascular lesions of nervous system	15	18	33
Coronary disease, angina	17	2	19
Hypertension with heart disease	—	2	2
Other heart disease	20	24	44
Other circulatory disease	8	6	14
Influenza	2	—	2
Pneumonia	1	3	4
Bronchitis	6	5	11
Other disease of respiratory system	1	—	1
Ulcer of stomach and duodenum	—	—	—
Gastritis, enteritis and diarrhœa	1	—	1
Nephritis and nephrosis	—	1	1
Hyperplasia of prostate	1	—	1
Pregnancy, childbirth, abortion	—	—	—
Congenital malformations	2	—	2
Other defined and ill-defined diseases ...	10	7	17
Motor vehicle accidents	1	—	1
All other accidents	3	2	5
Suicide	1	2	3
Homicide and operations of war	—	—	—
All Causes—Total	120	82	202

Infant Mortality during 1952

Cause of Death.	Under 1 week	1 to 2 weeks	1 to 6 months	6 to 12 months	Total under 1 year
Atelectasis Pulmon	1	—	—	—	1
Wide Patency of Ductus Arteriosus	1	—	—	—	1
Bilateral Purulent Broncho Pneumonia	1	—	—	—	1
Prematurity	4	—	—	—	4
Pneumonia	—	—	1	—	1
Misadventure	—	—	—	1	1
Hydrocephalus	—	1	—	—	1
Total ...	7	1	1	1	10

General Provision of Health Services for the Area

Domiciliary Services

There are five general medical practitioners living and carrying on the main part of their practice in different areas of the district. In addition to this, most of the Taunton Borough practitioners have some rural district residents on their lists, and there is also, as would be expected, some overlap from the surrounding rural districts in the provision of medical attention. There are adequate arrangements, when required, for domiciliary consultation with consultants serving the Taunton area, and speaking generally, the practice of medicine in the district is of a high standard. The provisions for domiciliary nursing are satisfactory and a good beginning has been made with the Home Help Service administered by the Somerset County Council.

Hospital Services

The Hospital Services of the district are administered by the Taunton Hospital Management Committee, under the general direction of the S.W. Regional Hospital Board. Some of the provisions for the needs of various types of patient are detailed below :—

(1) General Medical and Surgical

The Taunton and Somerset Hospital together with Musgrove Park Hospital which is also situated in the Borough of Taunton,

and which is probably eventually destined to supersede the first-named establishment, cater for most medical and surgical conditions. Musgrove Park Hospital takes most of the adult cases, and also has a comprehensive Pædiatric Department. The Taunton and Somerset Hospital is in the meantime dealing with Orthopædics, Ophthalmology and Ear, Nose and Throat work. It also houses the Casualty Department for the area. Both hospitals have out-patient facilities in addition to in-patient beds. Certain cases requiring special investigation or treatment such as neurosurgery or radiotherapy are referred to Bristol Hospitals for this purpose.

(2) Infectious Diseases

Cases of infectious disease from Taunton Rural District are sent to the Taunton Isolation Hospital, situated in the Borough of Taunton. This hospital was administered up to 4th July, 1948, by a Joint Hospital Board, representing the various districts from which cases were admitted. Since that date, administration has passed to the Regional Hospital Board, with day to day management being carried out by the Taunton Hospital Management Committee. There are three large wards for the isolation and treatment of patients suffering from the commoner epidemic diseases, but these have become less useful since Diphtheria has become a rare condition, chiefly owing to the success of the national immunisation campaign, and since Scarlet Fever has apparently entered a mild phase in which most of the cases can be successfully isolated and nursed at home. The bulk of the Isolation Hospital work is done in a more recently constructed cubicle block. The hospital has been admitting in the past year or two many cases, especially among children of various pyrexial and nutritional illnesses not coming into the strict category of notifiable diseases, which would formerly have been treated in General Hospitals. Home isolation is carried out wherever the home conditions are satisfactory. Most cases of Ophthalmia Neonatorum are admitted to the Isolation Hospital and also cases of Puerperal Pyrexia.

(3) Tuberculosis

Cases of pulmonary and non-pulmonary Tuberculosis come under the Regional Hospital Board for treatment, which is supervised by the Chest Physicians for the area. The Sanatoria are at Quantock, Wincanton and Taunton for pulmonary cases. Cases requiring Orthopædic treatment are admitted to the Chard Sanatorium and to Bath Orthopædic Hospital. Pre-tubercular children and children with tubercular glands are sent to Compton Bishop Children's Home, near Axbridge.

(4) **Poliomyelitis**

Suspected cases are sent for diagnosis to the Taunton Isolation Hospital. If the condition is confirmed they are seen by Regional Specialists who arrange for continuation treatment either as out-patients or as in-patients at Bath Orthopædic Hospital.

(5) **Small Pox**

Provision for the accommodation of cases of small pox is made at a hospital at Cossington, near Bridgwater. Fortunately there has been no need to use the institution for this purpose for many years.

(6) **Chronic Sick**

Patients are received into hospitals, chiefly those in Taunton and Wellington, which have now passed from Public Assistance administration to that of the Regional Hospital Board. The status and reputation of these institutions is improving, more or less rapidly, as their association with the less desirable features of the old Poor Law fades from public memory. A geriatric service for the Taunton area is in process of development.

Powers now exist under the National Assistance Act, 1948, Section 47, for the compulsory removal to a suitable institution of persons who are not able to devote to themselves and are not receiving from other people, proper care and attention. There are adequate safeguards against misuse of these powers, but cases do crop up from time to time where they are very useful and in the true interest of the person concerned. The onus is thrown upon the Medical Officer of Health to investigate these cases and to advise on whether these powers ought to be invoked. No cases required to be dealt with in this way in the Taunton Rural District during 1952, although preliminary steps were taken on one or two occasions and these resulted in removal to an institution without compulsion having to be applied.

(7) **Mental Sick**

Cases are admitted to the Mental Hospital at Tone Vale, near Taunton. The psychiatric specialists conduct out-patients' clinics for the area, and it is felt that now, more than ever before, mental patients are having the benefit of treatment at an earlier and more hopeful stage of the disease.

Mentally defective cases are well provided for at Sandhill Park Hospital which is situated in Taunton Rural District.

Clinics and Treatment Centres

Tuberculosis

Clinics for patients suffering from this disease, and for the supervision of suspects and contacts, are held by the Chest Physicians at Musgrove Park Hospital. There is an After-Care Committee working in co-operation with these clinics. Mass radiography has been carried out from time to time on various groups of the County population, by a team working from a centre in Bristol, but this service has not been called upon to deal with residents in Taunton Rural District.

Venereal Disease

A combined Clinic and Treatment Centre is carried on at the Taunton and Somerset Hospital which caters for male and female patients of this and surrounding districts. This centre has now come under the administration of the Regional Hospital Board. Early cases of syphilis are usually sent to Frenchay Hospital, Bristol, for a fortnight's intensive penicillin treatment as in-patients. Afterwards they continue observation and treatment at the Taunton Clinic.

Maternity and Child Welfare

The Maternity and Child Welfare Acts are administered by the County Council, under whose supervision are also the Health Visitors and Midwives practising within the area. There is an excellent Maternity Home in the Urban District of Wellington at which some of the mothers from Taunton Rural District are confined. Obstetric Consultants in Taunton are available for consultation with Medical Practitioners in the District. Abnormal and complicated cases can be admitted for hospital treatment when necessary. Every case of Puerperal Pyrexia and Maternal Mortality is investigated by the Medical Staff of the County Council.

Laboratory Facilities

The Public Health Laboratory Service has a Laboratory in Taunton which undertakes the bacteriological examination of swabs, blood, fæces and sputum, etc. This service is available also to the

Doctors practising in the District. Bacteriological and chemical analyses are also undertaken for the examination of milk, foods, water supplies and sewage effluents, etc. The co-operation and assistance of the Public Health Laboratory Staff in investigating all types of bacteriological and epidemiological problems is of the greatest value.

Ambulance Facilities

Ambulance transport for all cases has now become the responsibility of the Somerset County Council. A central ambulance department has been set up which arranges for vehicles to be provided as required.

Sanitary Circumstances of the Area

Water Supply

The Rural Water Supplies and Sewerage Act, 1944, places at the disposal of the Minister of Health a sum of £15,000,000 to assist schemes executed after the war for the provision or improvement of water supply and of sewerage facilities in Rural Districts, regard being taken, amongst other things, to the needs of industry and agriculture. The Council have under consideration a post-war scheme for the extension of a piped water supply to parishes requiring it. The provision of such a supply is most urgently needed in the following cases:—Cheddon Fitzpaine, Creech St. Michael (Adsborough), Durston (the village), Kingston (the village, Greenway, Parsonage Lane, Fulford and Dodhill), Otterford (Bishopswood), Tolland (the village), West Hatch (the village and higher portion of the parish), West Monkton (the village, Cherry Grove and Gotton).

Some of the parishes mentioned are within the limits of supply of the Taunton Corporation Water Undertaking, and any supply required in them must be obtained by application to the Corporation. The following parishes are within the limits of supply of the Taunton Corporation:—Bishops Hull, Cheddon Fitzpaine, Corfe, Creech St. Michael, Kingston, Norton Fitzwarren, Orchard Portman, Pitminster, Ruishton, Staplegrove, Thornfalcon, Trull and West Monkton.

Five Water Undertakings are owned by the Taunton Rural District Council as follows:—

- (1) Westleigh, Lydeard St. Lawrence
- (2) West Bagborough
- (3) Cothelstone
- (4) Eastern Parishes (former Portman supply)
- (5) Churchstanton

The piped water supply to other parts of the District has been, on the whole, bacteriologically satisfactory, several examinations having been made during the course of the year. The supplies have also been satisfactory in quantity apart from fairly severe summer shortage in the Portman Supply. This shortage is likely to recur in future years and the problem in the parishes affected, namely, West Hatch, North Curry, Stoke St. Gregory and Thornfalcon, is unlikely to be solved until the new scheme of supply for these areas has been put into operation. Some of the wells in the district yield satisfactory waters but others are very liable to contamination. With these, chlorination or other methods sometimes result in a pure supply but many of the wells are shallow and can never be relied upon to give a constant wholesome supply. In these cases boiling of the water is usually advised and the problem will not be satisfactorily solved until piped water is taken to the properties concerned. In the parish of West Hatch there was again a serious shortage of well water during the summer ; this is a recurring trouble and the projected water scheme for the Eastern parishes of the District will be most beneficial to this area.

Piped water was laid on in the usual way to all Council houses which were completed during 1952.

Taunton Borough Council has had surveys carried out for the building of a large impounding reservoir at Clatworthy in the region of the headwaters of the river Tone. If this scheme is brought into operation there will probably be a large surplus of water over and above the needs of the Borough and this should make available an abundant supply for the Taunton Rural District, but it will, of course, be a considerable time before these plans materialise.

The following return presents in tabular form the position as to the distribution of piped water supplies in the District :—

PARISH.	Area of Parish. Acres.	No. of houses in Parish.	No. of houses having a piped water supply under pressure into or on to the house (including those with a tap outside only).	Of the houses not included in 3 (1), the number having within 100 yards of a water main available for a supply.	Of the houses not in 3 (1) & (2) the number that are in villages, hamlets or groups consisting of 20 or more houses so placed as to lie within a circle $\frac{1}{4}$ mile in diameter.	Of the houses not connected to a public sewer the number in villages, hamlets or groups of 20 or more houses so placed as to lie within a circle $\frac{1}{4}$ mile in diameter.
	1	2	3 (1)	3 (2)	3 (3)	4
Ash Priors	641	36	19	11	—	—
Bickenhall	1143	45	36	—	—	—
Bishops Hull	1283	450	441	9	—	—
Bishops Lydeard	4832	551	340	42	—	20
Cheddon Fitzpaine	1883	133	41	17	—	23
Churchstanton	5435	173	64	—	—	38
Combe Florey	1382	70	56	4	—	—
Corfe	1165	78	77	—	—	22
Cothelstone	1455	40	16	—	—	—
Creech St. Michael	2298	304	201	3	—	172
Curland	648	39	21	—	—	—
Durston	1013	51	—	—	—	43
Halse	1320	84	44	15	—	58
Hatch Beauchamp	1408	128	105	5	—	—
Kingston	2584	232	30	—	79	123
Lydeard St. Lawrence	2748	118	79	2	—	39
North Curry	5822	410	338	30	—	—
Norton Fitzwarren	2054	237	192	70	—	—
Orchard Portman	1665	50	26	—	—	—
Otterford	2446	112	—	—	34	—
Pitminster	5780	386	247	84	—	34 (Pitminster)
Ruishton	1027	145	123	27	—	33 (Blagdon)
Staple Fitzpaine	3029	58	43	—	—	64 (Staplehay)
Staplegrove	1027	87	51	42	—	49
Stoke St. Gregory	4135	353	349	3	—	114
Stoke St. Mary	2019	159	106	9	—	—
Thornfalcon	822	46	41	—	—	—
Tolland	842	24	2	—	—	—
Trull	2172	288	236	36	—	140
West Bagborough	2006	113	101	—	—	57
West Hatch	1619	89	11	—	—	—
West Monkton	2972	396	253	87	20	110 (Bathpool)
						101 (M. Heath.)
						39 (Village)

Sewerage and Sewage Disposal

Proper sewage disposal is not only an amenity but it is a necessity and is essential whenever a piped water supply has been provided. Pail closets and privy middens are most undesirable because they are more often than not badly attended to owing to the unpleasant work connected with them. A multiplication of privately owned cesspools and septic tanks is also undesirable and these have been increasing in number because of the addition of water closets and baths to houses having a piped water supply.

The Rural District as a whole is very poorly sewered, but the Council are alive to this fact and are very anxious to effect improvements as soon as economic conditions in the country permit. Schemes have been prepared by the Consulting Engineers to deal with various parts of the district, and it is hoped that a beginning can be made with these in the near future. A special Sub-Committee of the Council was constituted during the course of the year to inspect, along with Council officials, certain areas of the district in which sewage disposal arrangements were particularly bad, and a rough scale of priorities was drawn up to act as a guide in deciding on the schemes which should receive most urgent consideration.

During the course of the year a number of cases of alleged nuisance arising from the effluents of septic tanks were investigated. Some of the complaints were fully justified and various measures were taken in an attempt to improve matters.

Only 7 parishes out of 32 in the District have sewage disposal works of their own, these being the parishes of :—

Bishops Hull—though some 30 houses or so are not connected with the main sewer. *Bishops Lydeard*—some of the Council houses in this parish are not connected with the sewer. *Combe Florey*—the disposal works here serve their purpose for the time being but is not large enough to deal with sewage from any more houses. *Corfe*—new disposal works have recently been constructed in this parish because of a very objectionable nuisance which existed there. The piping involved in carrying out this work will be made use of when the major scheme for the Rural District as a whole is brought into operation. *Hatch Beauchamp*—these works are very old and entirely unsatisfactory. A considerable portion of this village is not sewered at all. *North Curry*—the works are in the nature of a sewage farm. They are overloaded and the land is suffering from “Sewage sickness”. *Norton Fitzwarren*—recent disposal works have been constructed here and should prove ample and satisfactory for a further increase in population.

A large Sewage Disposal Works to be situated in the parish of Creech St. Michael is planned for the Borough of Taunton and when

this is constructed it is intended that a great deal of the sewage from the adjacent parts of the Rural District will be dealt with at these works.

Refuse Collection

The reorganised system of refuse and salvage collection commenced in the year 1951 is still operating satisfactorily and the quantity of waste material removed continues to increase in volume and also offensiveness. Consideration of the quantity and condition of the waste material on the Council's tip makes one appreciate this vital service, which should be considered of equal importance with the provision of clean, wholesome food, piped water supplies, and main drainage.

One major point I would like to stress is the apparent lack of interest on the part of many people in the provision of suitable containers for storing refuse and the almost complete disregard for elementary dustbin hygiene. Many of the containers used are totally dilapidated and allow flies and other pests to enter and leave the waste material with the greatest of ease—this point is further emphasised by the fact that these so-called containers are, for the sake of convenience, usually placed in a position near the room used for the storage and preparation of food. Apart from the use of unsuitable containers for the storage of waste materials, dustbin hygiene appears to be absolutely neglected. If only householders would try and consider the dustbin in the same sphere as the kitchen sink and closet, and give it the same attention, much of the fly and vermin trouble experienced in the vicinity of the home, and also on the Council's refuse tip, would be considerably reduced. Many of the loads of refuse are fly-ridden and full of maggots when they reach the Council's disposal depot at West Monkton, and much time and money is spent on spraying this refuse with Gammaxane and DDT powders and liquids, plus the provision of suitable covering materials. Owing to the compact nature of the material as it leaves the refuse lorries, spraying at the tip can never be wholly successful as the powder or liquid does not penetrate to the centre of the load.

Salvage Collection

				T.	C.	Qrs.	lbs.	£	s.	d.
Mixed waste	paper	...	...	9	3	3	0	115	5	5
Cardboard	...	...	...	20	11	2	0	70	11	9
Newsprint	...	...	...	13	5	3	0	151	16	11
Periodicals and	magazines	...	...	5	8	2	0	22	11	9
Rags	...	...	...	1	16	1	10	35	1	6
Wool	...	...	...		2	3	16	9	11	2

Sacking	...	...	...	1	19	0	11	15	8	5
String	...	...	...		1	1	2		10	3
Bottles	...	...	...					10	10	0
Scrap iron	...	...	...	19	5	1	3	126	8	9
Mixed metals	...	...	...	1	5	2	0	85	17	6
Car tyres	...	...	...						10	0
Scrap lead	...	...	...		1	1	23	5	19	0
Petrol cans, drums, etc.	...	...	...					1	0	0
Bedside rails	...	...	...					3	4	6
								£654	6	7

This resulted in a surplus of £327 1s. 5d.

SANITARY INSPECTION OF THE AREA

The following tabular statement is furnished by the Sanitary Inspector:—

Number and nature of inspections during the year 1952:—

Dwelling houses	...	...	...	...	...	97
Bakehouses	...	...	...	...	...	8
Food premises	...	...	...	...	...	179
Government Slaughterhouse	...	...	...	...	...	263
Dairies and Milkshops	...	...	...	...	...	4
Factories and Workshops	...	...	...	...	...	19
Water supplies	...	...	...	...	...	166
Drainage, foul ditches, etc.	...	...	...	...	...	191
Movable dwellings	...	...	...	...	...	113
Infectious diseases	...	...	...	...	...	11
Refuse and salvage collection and disposal	...	...	...	...	...	267
Miscellaneous	...	...	...	...	...	123

Water Samples

167 samples of water have been obtained for bacteriological examination during the year. Of this number 82 have been taken from private supplies, and reported on as follows:—

Grade 1.	24	samples.
2.	8	„
3.	13	„
4.	37	„
		—
	82	„
		—

Advice on improving existing supplies and warnings against drinking water without boiling have been issued in all appropriate cases.

85 samples of water have been obtained from public supplies in the area. The results are as follows:—

Supply.				No. of Samples.	Satisfactory.	Unsatis- factory.
West Bagborough	...	...	...	15	10	5
Cothelstone	...	...	...	16	6	10
Lydeard St. Lawrence	...	...	...	18	15	3
Portman Supply (chlorinated)	...	...	...	30	10	20*
Churchstanton (chlorinated)	...	...	...	6	6	0

*New Chlorination Plant installed November, 1952.

Investigations have been made in conjunction with the Surveyor to the Council in cases where reports fall short of the required standard—recent samples have now shown a marked improvement.

Five chemical analyses have been taken and all were satisfactory.

Smoke Abatement

No cases occurred during the year.

Swimming Baths and Pools

There are none in the area.

Eradication of Bed Bugs

No cases occurred during the year.

Rodent Control

An operator is employed jointly with Wellington R.D.C. During the year the sewers, sewage disposal works and refuse dumps were inspected and treated systematically. Private dwelling houses and business premises have been surveyed and treated both from complaints made and infestations discovered during surveys. The inspections of farm premises have been carried out in areas suspected in conjunction with complaints, and co-operation with the Agricultural Executive Committee Pest Department has been working effectively. Summary of inspection and control measures taken are as follows:—

1. Prevalence of Rats and Mice

Type of Property	(i)	(ii) (iii) (iv) Number of Properties in Local Authority's area			(v)	(vi)	(vii)
		in which infestation was					
		Notified by Occupier	Otherwise discovered	Recorded Total of (ii) and (iii)			
Total in Area							
Local Authority's Property ...	7	1	6	7	3	4	Nil.
Dwelling House ...	5,067	124	79	203	20	183	3
Business Premises	354	9	51	60	31	29	2
Agricultural Pro- perty ...	539	7	78	85	23	62	Nil.
Total ...	5,967	141	214	355	77	278	5

2. Measures of Control by Local Authority

Type of Property	No. of Properties inspected	Number of Notices served under Sec. 4		Number of treatments carried out				Block treatment of properties in different occupancies under Sec. 6 (1) or by informal arrangements			
				By arrangement with occupier		Under Section 5 (1)					
		Treatments	Works	Rats	Mice only	Rats	Mice only	Number of Blocks	Surface	Associated Sewers	Number of Manholes treated
Local Authority's Property ...	7	Nil.	Nil.	28	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	
Dwelling House ...	335	Nil.	Nil.	200	3	Nil.	Nil.	9	40	14	
Business Premises	87	Nil.	Nil.	14	2	Nil.	Nil.	Nil.	Nil.	Nil.	
Agricultural Property ...	129	Nil.	Nil.	4	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	
Total ...	558	Nil.	Nil.	246	5	Nil.	Nil.	9	40	14	

Offensive Trades

There are two offensive trades in the district within the meaning of Section 107 of the Public Health Act, 1936. One is that of tripe boiling and the other a Knacker's Yard for the provision of dog and cat food.

Bakehouses

There are 13 bakehouses in the district and 8 visits were made to them during the year. Several minor defects have been noted and dealt with by informal action.

Milk and Dairies Regulations, 1949

The number of persons registered with the Council as distributors of milk in the area is 8.

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulation, 1949

One dealer's licence is in force under the above Regulation, plus three dealers' supplementary licences.

Milk (Special Designation) (Raw Milk) Regulation, 1949

Seven dealers' licences are in force under the above Regulation, plus five dealers' supplementary licences.

Ice Cream

The number of retailers of this product in the area is 30; of this number one only is an actual manufacturer. The remainder of the retailers sell pre-packed ice cream, which is stored in properly constructed refrigerators.

Meat Inspection

The inspection of calves at the Creech St. Michael Slaughterhouse is still being carried out in accordance with the system described in the 1950 Annual Report.

In this Annual Report I should like to raise several points as to the Meat Inspection Service.

A. Buildings.

Except for the addition of a few new experimental slaughterhouses, no improvements seem to be contemplated to existing slaughterhouses which have been running above the designed capacity since 1940. Several large authorities constructed modern abattoirs before the war, and surely the experience gained in the running of these specialist buildings could have been used to evolve the modern abattoir without a further experimental period.

B. Ownership of Slaughterhouses.

Many of the present-day slaughterhouses are not owned by the Ministry but by private individuals acting as contractors. This state of affairs, and also the fact that the Ministry may terminate the agreement at short notice, does not encourage the contractor to improve his premises from a hygienic and meat inspection point of view. The main improvements seem to tend towards making provision for as many animals as possible—especially where payment is based on output.

C. Inspection.

In this area the inspection of meat has been based on Memo. 62—Food, but owing to the fact that Meat Inspection appears to me to be only a secondary consideration to output and must be made to fit in with the present line system craze, we have never been able to secure more than a 50 per cent. compliance. The advent of Memo. 3—Meat makes an already unsatisfactory situation even more ludicrous.

D. Tuberculosis in Calves.

In the 1950 Annual Report, reference was made to the inadequate marking of calves and the subsequent impossibility of tracing the dam in cases of Tuberculosis. No improvements have taken place in this very important link.

	Cattle excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed (if known)	0	0	20,806	196	0
Number inspected ...	0	0	20,806	196	0
All diseases except Tuberculosis.					
Whole carcasses condemned	0	0	147	9	0
Carcases of which some part or organ was con- demned	0	0	96	12	0
Percentage of the number inspected affected with disease other than Tuberculosis	0	0	1.16	10.7	0
Tuberculosis only.					
Whole carcasses condemned	0	0	12	0	0
Carcases of which some part or organ was con- demned	0	0	4	0	0
Percentage of the number inspected affected with Tuberculosis	0	0	0.07	0	0

The following were also condemned as being unfit for food :—

	lbs.		tins
Bullocks' Liver	8½	Boneless Ham	8
Forequarters Beef	63	„ Pork Butts	1
Home-killed Hindquarters	10	Luncheon Meat	17
Rump	42	Veal & Ham Loaf	1
Irish Cooked Ham	14½	Jellied Pork	2
Cheese	16½	Grade 3 Salmon	1
Margarine	6	Tomato Soup	1
Pastry Margarine	11	Carrots	1
		Condensed Milk	73

Food Poisoning Outbreaks

One outbreak of Food Poisoning occurred in the District in the year under review, involving eleven cases at a Military Camp. The infection was mild and was quickly brought under control.

FACTORIES ACT, 1937

The inspection of factories and workshops in the district from a public health point of view is carried out by the staff of the Public Health Department. Routine visits are paid to the various premises and the following table gives particulars of this work. It is to be noted that the term Factories as used in this connection now includes Workshops, which accounts for the large number on the Register in this Rural District.

1.—**Inspections** for purposes of provisions as to health (including inspections made by Sanitary Inspectors):—

Premises.	Number on Register.	Number of		
		Inspec- tions.	Written notices.	Occupiers prose- cuted.
(i) Factories in which Section 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	11	2	0	0
(ii) Factories not included in (i) to which Section 7 applies	60	17	2	0
(iii) Other Premises under the Act (excluding out-workers' premises)	0	0	0	0
Total ...	71	19	2	0

2.—Cases in which defects were found :—

Particulars.	Number of cases in which defects were found.				Number of cases in which prosecutions were instituted.
	Found.	Remedied	Referred		
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S.1)	1	1	0	1	0
Overcrowding (S.2) ...	0	0	0	0	0
Unreasonable temperature (S.3)	0	0	0	0	0
Inadequate ventilation (S.4)	0	0	0	0	0
Ineffective drainage of floors (S.6)	0	0	0	0	0
Sanitary conveniences (S.7)					
(a) Insufficient ...	1	1	0	1	0
(b) Unsuitable or defective	2	1	0	2	0
(c) Not separate for sexes	0	0	0	0	0
Other offences (not including offences relating to Homework) ...	0	0	0	0	0
Total ...	4	3	0	4	0

HOUSING

Three houses condemned under the Housing Act, 1936, at Athelney, North Curry and West Monkton had their licences renewed. This re-occupation of condemned houses is not an infringement of Sec. 155 (3) of the Housing Act, 1936, as it is an emergency measure resulting from the past war and designed to meet the housing needs of the influx of agricultural workers and covered by Regulation 68a Defence (General) Regulations, 1939. These houses have been inspected by the Medical Officer of Health, who reported to the Council the minimum repairs, etc., necessary to bring them into such a condition of cleanliness and repair as to be reasonably capable of being used as a temporary measure for housing purposes without detriment to health. Where the owner has complied with the recommendations, the Council may issue a licence authorising the occupation of a house, but the licence is not operative for more than six months at a time.

The Council have had under consideration the post-war housing needs of the District (*a*) to replace unfit dwellings; (*b*) to abate overcrowding; (*c*) for other reasons.

A survey of housing in the district under £16 rateable value, excluding Council houses and houses erected after 1930 was carried out and the following tables give the position as it existed at the end of 1949. The figures provide useful data in assessing the housing needs in various parts of the district :—

(1) Houses satisfactory in all respects	458 or 14.1% of the total.
(2) Houses with minor defects ...	2,072 or 63.8% do.
(3) Houses with major defects and/or requiring structural alterations	366 or 11.3% do.
(4) Houses provisionally graded as unfit	350 or 10.8% do.

The houses in categories (2) and (3) as far as existing conditions permit will be improved so that they may be placed in a higher grade. Of the houses provisionally graded as unfit, 8 were

purchased by private individuals, on becoming vacant, and the new owners reconstructed them under licence and made them satisfactory in all respects.

The survey also showed that—

- 14.6% of the houses were connected to the sewer.
- 25.5% of the houses had septic tanks for sewage disposal.
- 59.9% of the houses used pail closets or similar types as their sanitary accommodation.
- 62.4% of the houses were supplied from the main water supply.
- 31.5% of the houses were supplied from wells.
- 6.1% of the houses were supplied from springs.
- 49.0% of the houses were provided with wash-up sinks.
- 14.7% of the houses were provided with baths.
- 9.5% of the houses used gas for lighting, some of these also using it for heating and/or cooking.
- 35.2% of the houses used electricity for lighting, some of these also using it for heating and/or cooking.

The Council's building programme was as follows :—

Parish.		Number completed during year 1952	Number under construction at 31st Dec., 1952
Bishops Lydeard	...	22	30
Churchstanton	...	10	—
Otterford	...	4	—
Norton Fitzwarren	...	—	58
		—	—
		36	88
		<u> </u>	<u> </u>

The following table shows the Parishes in which the Council have erected houses under the various Acts :—

Parish.	Address.	Number of Houses.
Bishops Hull ...	1/70 Smithy Cottages ...	70
do. ...	20/35 Mountway Cottages ...	16
		— 86
Bishops Lydeard ...	1/8 Gore Cottages ...	8
do. ...	1/10 Pound Lane ...	10
do. ...	1/12 Mill Lane Cottages ...	12
do. ...	1/30 Halfyard Cottages ...	30
do. ...	1/22 Darby Way ...	22
		— 82
Cheddon Fitzpaine ...	1/8 School Cottages ...	8
Churchstanton ...	1/4 Stapley Cottages ...	4
do. ...	1/4 Church Road Cottages ...	4
do. ...	1/6 Gillards Mead ...	6
do. ...	7/16 Gillards Mead ...	10
		— 24
Combe Florey ...	1/4 Meadowside ...	4
Corfe ...	1/4 Brook Cottages ...	4
Creech St. Michael ...	1/8 Ryes Terrace ...	8
do. ...	1/6 Charlton Lane Cottages ...	6
do. ...	1/4 Cheads Cottages ...	4
do. ...	1/16 Rocketts Cottages ...	16
do. ...	1/10 Creechwood Terrace ...	10
		— 44
Curland ...	1/4 Castle View ..	4
Hatch Beauchamp ...	1/4 Palmers Green Cottages ...	4
do. ...	1/8 Crimthorne Cotts ...	8
		— 12
Kingston ...	1/6 Parks Cottages ...	6
do. ...	1 and 2 Chaces ...	2
do. ...	1/8 Greenway Terrace ...	8
do. ...	1/4 Fulford Cottages ...	4
do. ...	1/10 Parsonage Cottages ...	10
		— 30
Lydeard St. Lawrence..	1/8 Cross Croft ...	4
do. ...	1/4 Nethercott Road ...	8
		— 12

Parish.		Address.		Number of Houses.
North Curry	...	1/6 Oxen Lane	...	6
do.	...	1/4 Backham Cottages	...	4
do.	...	1/10 Croft Cottages	...	10
do.	...	1/8 Lillesdon Terrace	...	8
do.	...	1/8 Cricket Cottages	...	8
do.	...	1/14 Town Close	...	14
do.	...	21/24 do.	...	4
do.	...	15/20 do.	...	6
				— 60
Norton Fitzwarren	...	1/4 Burnshill Terrace	...	4
do.	...	1/24 Rectory Road Cottages	...	24
do.	...	1/10 Station Road Cottages	...	10
do.	...	1/4 Manleys Cottages	...	4
do.	...	1/4 Court Cottages	...	4
do.	...	1/10 The Crescent	...	10
				— 56
Otterford	...	1/4 Brook Cottages	...	4
Pitminster	...	1/8 Littleham Cottages	...	8
do.	...	1/8 Colleylake Cottages	...	8
				— 16
Ruishton	...	1/5 Ruishton Lane Cottages	...	5
do.	...	1/3 Lipe Lane Cottages	...	3
do.	...	1/4 Slades Cottages	...	4
do.	...	1/12 Steart Cottages	...	12
				— 24
Staplegrove	...	1/6 Hillhead Cottages	...	6
Stoke St. Gregory	...	1/16 Willey Road	...	16
do.	...	1/8 Stathe Cottages	...	8
do.	...	1/20 Woodhill Terrace	...	20
do.	...	1 and 2 Meare Green Cottages	...	2
				— 46
Stoke St. Mary	...	1/4 Homefield Cottages	...	4
do.	...	1/8 Pattens Cottages	...	8
				— 12
Thornfalcon	...	1/8 Glebe Cottages	...	8
Trull	...	1 and 2 Horts Cottages	...	2
do.	...	7/14 Mill Lane	...	8
do.	...	1/4 The Green	...	4
				— 14

Parish	Address			Houses Number of
West Bagborough	...	1/10	Vale View Cottages	10
do.	...	1/4	Hill View Cottages	4
do.	...	1/4	South View Cottages	4
do.	...	1/4	Parkside	4
				— 22
West Monkton	...	1/4	Titley Cottages	4
do.	...	1/4	Brittons Ash Cottages	4
do.	...	1/6	Hyde Lane Cottages	6
do.	...	1/14	School Road Cottages	14
do.	...	1/8	Elms Estate	8
do.	...	21/54	do.	34
do.	...	9/16	do.	8
do.	...	17/20	do.	4
				— 82
TOTAL				660

Of the above total of 660 houses, 204 were built to replace houses dealt with by Slum Clearance in previous years, under the Housing Acts of 1930 and 1936.

Ex-Military Camps

In September, 1946, the Taunton Rural District Council took over the administration of Camps at Pyrland, Courtlands and Sandhill Park on behalf of the Ministry of Health. These camps had been occupied unofficially by a process of “squatting”. In 1947 a similar camp at Culmhead was taken over. The accommodation in the camps consists of Nissen or similar type of huts, some of which have been modified to make them more suitable for family occupation. They are far from ideal from the housing point of view, and their use can only be looked upon as a temporary expedient, but at least they provide some relief in the present desperate housing shortage.

The number of occupied huts in each of the three camps at the end of 1951 was as follows:—

Courtlands	...	...	...	...	11
Sandhill Park	...	...	...	...	131
Culmhead	...	...	...	...	10

PREVALENCE AND CONTROL OF INFECTIOUS DISEASES

The following table gives the number of notifications received for various notifiable diseases (other than Tuberculosis), their age groups and the notification rates compared with those of England and Wales, and the number admitted to the Isolation Hospital :—

Diseases.	No. of Notifications.	AGE GROUPS.							No. admitted to Isolation Hospital.
		0—	1—	3—	5—	10—	15—	25 & over	
Scarlet Fever ...	33	—	2	5	22	2	—	2	6
Whooping Cough	16	—	3	4	9	—	—	—	—
Diphtheria ...	—	—	—	—	—	—	—	—	—
Measles ...	27	1	4	2	17	1	1	1	1
Erysipelas ...	3	—	—	—	—	—	—	3	1
Puerperal Pyrexia	1	—	—	—	—	—	—	1	—
Acute Pneumonia	4	—	—	—	1	—	—	3	—
Food Poisoning ...	11	—	—	—	—	—	7	4	—
Meningococcal Infection ...	1	—	—	—	—	—	1	—	—
Total ...	96	1	9	11	49	3	9	14	8

Notification rates for Taunton Rural District compared with those of England and Wales taken as a whole are calculated per 1,000 civilian population, except Puerperal Pyrexia which is calculated per 1,000 total live and still births :—

Diseases.	No. of Notifications.	Rates for	
		Taunton R.D.	England and Wales.
Scarlet Fever ...	33	1.53	1.53
Whooping Cough ...	16	0.75	2.61
Measles ...	27	1.25	8.86
Acute Pneumonia ...	4	0.19	0.72
Erysipelas ...	3	0.14	0.14
Puerperal Pyrexia ...	1	2.99	17.87
Acute Poliomyelitis ...	—	—	0.09
Food Poisoning ...	11	0.51	0.13
Typhoid Fever ...	—	—	0.00
Paratyphoid ...	—	—	0.02
Diphtheria ...	—	—	0.01
Meningococcal Infection	1	0.04	0.03
Smallpox ...	—	—	0.00
Dysentery ...	—	—	0.00

TUBERCULOSIS

The following table gives the number of new cases of respiratory and non-respiratory Tuberculosis notified during 1952 and mortality from the disease :—

New Cases and Mortality during 1952

Ages in Years.				New Cases.				Deaths.			
				Resp'tory.		Non-Resp.		Resp'tory.		Non-Resp.	
				M.	F.	M.	F.	M.	F.	M.	F.
0 — 1	...	...	...	—	1	—	—	—	—	—	—
1 — 5	...	...	...	—	—	—	—	—	—	—	1
5 — 10	...	...	...	2	1	1	—	—	—	—	—
10 — 15	...	...	...	—	—	—	1	—	—	—	—
15 — 20	...	...	...	1	2	—	—	—	—	—	—
20 — 25	...	...	...	6	1	2	—	—	—	—	—
25 — 35	...	...	...	6	2	—	—	—	—	—	—
35 — 45	...	...	...	2	—	—	—	2	—	—	—
45 — 55	...	...	...	2	—	—	—	—	1	—	—
55 — 65	...	...	...	4	—	—	—	—	—	1	—
65 and up...	...	...	...	—	—	—	—	1	—	—	—
Not known	...	...	...	2	1	—	1	—	—	—	—
Total	...	...	...	33		5		4		2	

At the end of the year, the Tuberculosis Register contained the names and addresses of 113 cases of pulmonary Tuberculosis and 23 cases of non-pulmonary Tuberculosis.

No action had to be taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, relating to persons suffering from pulmonary Tuberculosis employed in the milk trade, or under Section 172 of the Public Health Act, 1936, relating to the compulsory removal to hospital of persons suffering from Tuberculosis.

Prevention of Blindness

No arrangements have been made by the Local Authority with respect to the prevention of Blindness, under Section 176 of the Public Health Act, 1936. Cases of Ophthalmia Neonatorum are notified by the Doctors to the Public Health Department of the County Council and when necessary are admitted to the Taunton Isolation Hospital.

Diphtheria Prophylaxis

Immunisation against Diphtheria continues to be carried out by the Medical Staff of the Somerest County Council and by the Medical Practitioners in the District. The County Council's Immunisation Scheme, which was begun in Taunton Rural District during 1941, continues to make progress, and the following figures supplied by the County Council show the condition of the child population as regards immunisation at the end of 1952:—

Pre-School Children : aged 0—4 years

Number Immunised.	Estimated percentage immunised of total children in this Age Group.
544	34.82

School Children : aged 5—14 years

Number Immunised.	Estimated percentage immunised of total children in this Age Group.
1,374	57.45

One case of diphtheria was notified in the district during the course of the year, but further investigation disproved the presence of this infection.

In the recent Circulars (193/45 and 194/45), issued by the Ministry of Health, stress is rightly laid on ensuring primary inoculation of as many pre-school and school children as possible. At the

same time it must be remembered that if Diphtheria is to be kept under control, the state of resistance of children who have received primary immunisation must be maintained by re-inoculation at suitable intervals. Infants of the age of 8 to 9 months should be immunised because one of every two unimmunised contracting the disease under the age of one year, dies. By the time the child reaches school age, the primary stimulus of earlier immunisation has waned, and, to remedy this, every child should be given a reinforcing dose of antigen before he begins school attendance.

